

Application Serial No. 10/623,723
Amendment dated December 10, 2004
Reply to Office Action dated October 19, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)

2. (canceled)

3. (currently amended): ~~The blower housing of Claim 1, wherein said second housing member includes~~ A blower housing for a blower assembly of the type used for expelling gases from a furnace, the blower housing comprising:

a cavity, an inlet, and an extension portion extending from said cavity and terminating in an outlet, said blower housing formed from at least three separate housing members, comprising:

a first housing member;

a second housing member attached to said first housing member and cooperating with said first housing member to define said cavity, said second housing member including a substantially planar wall adapted for mounting said blower housing to a furnace, said inlet comprising an opening in said substantially planar wall, said second housing member further including a first extension wall; and

a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension wall, said first and second extension walls cooperating to define said extension portion.

4. (original): The blower housing of Claim 3, wherein said extension portion extends angularly away from said substantially planar wall, whereby said outlet is offset from said substantially planar wall.

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5. (currently amended): ~~The blower housing of Claim 2,~~ A blower housing for a blower assembly of the type used for expelling gases from a furnace, the blower housing comprising:

a cavity, an inlet, and an extension portion extending from said cavity and terminating in an outlet, said blower housing formed from at least three separate housing members, comprising:

a first housing member;

a second housing member attached to said first housing member and cooperating with said first housing member to define said cavity, said second housing member including said inlet and a first extension wall; and

a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension wall, said first and second extension walls cooperating to define said extension portion; and

said first and second extension walls terminating in first and second outlet walls, respectively, wherein said outlet is circular, each of said first and second outlet walls curved in shape and cooperating with one another to define said outlet.

6. (currently amended): ~~The blower housing of Claim 2,~~ A blower housing for a blower assembly of the type used for expelling gases from a furnace, the blower housing comprising:

a cavity, an inlet, and an extension portion extending from said cavity and terminating in an outlet, said blower housing formed from at least three separate housing members, comprising:

a first housing member;

a second housing member attached to said first housing member and cooperating with said first housing member to define said cavity, said second housing member including said inlet and a first extension wall; and

a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension wall, said first and second extension walls cooperating to define said extension portion; and

said first and second extension walls terminating in first and second outlet walls, respectively, wherein said outlet has a cylindrical profile, each of said first and second outlet walls shaped as a half cylinder whereby said first and second outlet walls cooperate to define said outlet.

7. (currently amended): The blower housing of ~~Claim 1~~ Claim 3, further comprising a cavity outlet defined at least in part by said first and second housing members, said extension portion extending from said cavity outlet to said outlet of said blower housing.

8. (original): The blower housing of Claim 7, wherein said cavity outlet has a rectangular profile with said first and second housing members cooperating with one another to define said cavity outlet.

9. (currently amended): The blower housing of ~~Claim 1~~ Claim 3, wherein each of said first and second housing members includes an outer flange around at least a portion of a periphery thereof, one of said flanges crimped over the other of said flanges to secure said first and second housing members together.

10. (canceled)

11. (currently amended): ~~The blower housing of Claim 10;~~ A blower assembly for attachment to a furnace, comprising:

a blower housing including an impeller cavity having an inlet, and an extension portion extending from said impeller cavity and terminating in an outlet, said blower housing further comprising:

a first housing member;

a second housing member attached to said first housing member and cooperating with said first housing member to define said impeller cavity, said second housing member further including said inlet and a first extension wall having a curved end portion; and

a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension wall having a curved end portion, said first and second extension walls cooperating to define said extension portion and said curved end portions of said second and third housing members cooperating to define said outlet, wherein said outlet has a cylindrical profile defined by said curved end portions of said first and second extension walls;

a motor attached to said blower housing, said motor including an output shaft extending into said impeller cavity; and

an impeller mounted to said motor output shaft and disposed within said impeller cavity, whereby upon rotation of said impeller by said motor, air is drawn into said inlet and is forced through said extension portion and out of said blower housing outlet.

12. (currently amended): ~~The blower housing of Claim 10, wherein said second housing member includes~~ A blower assembly for attachment to a furnace, comprising:

a blower housing including an impeller cavity having an inlet, and an extension portion extending from said impeller cavity and terminating in an outlet, said blower housing further comprising:

a first housing member;

a second housing member attached to said first housing member and cooperating with said first housing member to define said impeller cavity, said second housing member further including a substantially planar surface adapted for mounting said blower housing to a furnace, said inlet comprising an opening in said substantially planar surface, and a first extension wall having a curved end portion; and

a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension wall having a curved end portion, said first and second extension walls cooperating to define said extension portion and said curved end portions of said second and third housing members cooperating to define said outlet;

a motor attached to said blower housing, said motor including an output shaft extending into said impeller cavity; and

an impeller mounted to said motor output shaft and disposed within said impeller cavity, whereby upon rotation of said impeller by said motor, air is drawn into said inlet and is forced through said extension portion and out of said blower housing outlet.

13. (original): The blower housing of Claim 12, wherein said extension portion extends angularly away from said substantially planar surface, whereby said outlet is offset from said substantially planar surface.

14. (currently amended): The blower housing of ~~Claim 10~~ Claim 11, wherein each of said first and second housing members includes an outer flange around at least a portion of a periphery thereof, one of said flanges crimped over the other of said flanges to secure said first and second housing members together.

15. (currently amended): The blower housing of ~~Claim 10~~ Claim 11, further comprising a rectangular impeller cavity outlet defined by said first and second housing members, said extension portion extending from said impeller cavity outlet to said outlet of said blower housing.

16. (original): A method of assembling blower housings of the type used with a blower motor and impeller for expelling gases from a furnace, said method comprising the steps of:

providing a first blower housing member which is common to at least two different types of blower housings;

providing at least two second blower housing members of different types;

selecting one of the second blower housing members;

providing at least two third blower housing members of different types;

selecting one of the third blower housing members;

attaching the first blower housing member, the selected second blower housing member, and the selected third blower housing member to one another to form a blower housing of a first type.

17. (original): The method of Claim 16, including the further steps of:
 providing another first blower housing member;
 selecting another type of each of the second and third blower housing members; and
 attaching the foregoing first, second, and third blower housing members to one another to form a blower housing of a second type.

18. (original): The method of Claim 16, wherein each type of blower housing includes an impeller cavity having an inlet, and a extension portion extending from the impeller cavity and terminating in an outlet.

19. (original): The method of Claim 18, wherein in each type of blower housing, the first and second blower housing members cooperate to define the impeller cavity, and the second and third blower housing members cooperate to define the extension portion and the outlet.

20. (original): The method of Claim 18, wherein each of the second blower housing members and each of the third blower housing members includes an extension wall, the extension walls of respective second and third blower housing members cooperating to define the extension portion of each blower housing, the different types of second and third blower housing members having extension walls of different dimensions.

21. (original): The method of Claim 18, wherein each of the second blower housing members and each of the third blower housing members includes an outlet wall, the outlet walls of respective second and third blower housing members cooperating to define the blower housing outlet of each blower housing.

22. (original): The method of Claim 21, wherein the outlet walls of each of the second and third blower housing members is curved in shape, whereby the outlet walls of respective second and third blower housing members cooperate to define a circular blower housing outlet.

23. (new): A blower housing, comprising:
a first housing member;
a second housing member attached to said first housing member and cooperating with said first housing member to define a cavity, said second housing member further including a base wall having an inlet opening, and a first extension portion extending angularly away from said base wall; and
a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension portion cooperating with said first extension portion to define an outlet opening.

24. (new): The blower housing of Claim 23, wherein said outlet opening is circular, each of said first and second outlet portions including curved sections cooperating with one another to define said outlet opening.

25. (new): A blower housing, comprising:
a first housing member;
a second housing member attached to said first housing member and cooperating with said first housing member to define a cavity, said second housing member including a first extension portion with a curved end; and
a third housing member attached to at least one of said first and second housing members, said third housing member including a second extension portion with a curved end, said first and second extension portions cooperating with one another to define an exhaust transition having a circular outlet opening defined by said curved ends.

26. (new): The blower housing of Claim 25, wherein said second housing member includes a substantially planar base wall with an inlet opening therein, said first extension portion extending angularly away from said base wall.